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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/326,035	06/04/1999	BRADLEY CAIN	2204/157	3619

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EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
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2126

13

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/326,035

Applicant(s)

CAIN ET AL.

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 3, 5 – 7, 10, 11, 13 – 15, 17 – 19, 22, 23, 25 – 27, 29 – 31, 34, and 35 U.S. Patent No. 6,360,266 to Pettus in view of U.S. Patent No. 5,719,942 to Aldred (hereinafter Aldred942).

As to claim 1, Pettus (column 4, lines 35 – 40; column 9, lines 49 – 61; column 15, line 33 – column 16, line 36) establishing communication (establish session) between a first application (application program 1100, Fig. 11) and a second application (networking service 1118, Fig. 11), comprising:

forwarding a notify message to the second application (application program 1100 activates service object reference, step 1206, Fig. 12), receipt of the notify message by the second application causing the second application to ascertain path data (in step 1304, the stack definitions contained in the service object are used by the server interface 1120 and the networking service 1118 to set up protocol stack layers, Figs. 12 and 13) for establishing a path (communication link) between the first application (application program 1100, Fig. 11) and the second application (stack definitions then set up DRPS 1124 and configure the communication link in preparation for sending

request and reply data between the application program 1100 and the remote service, Fig. 11);

the first application ascertaining path data (remote service address) for establishing a path between the first application and the second application (when the application program communicates with the remote service, it uses the remote service address passed through the communications directory service to the networking service); and

the first application and second application establishing a path between the first application and the second application after the path data is ascertained by the first application and the second application (step 1210, a separate data path is set up to send service requests from application program 1100 to the remote service... separate data path comprises data path 1102, client interface 1126 and the session layer 1123 of the DRPS 1124...reply information returns via DRPS 1124, data stream 1128, client interface 1126 and data path 1102 to the application program 1100, Figs. 11 and 12). Pettus teaches an identifier associated with a specific type (stack definition) of information (different type of communication link) to be transferred on the path (stack definitions each consist of a set of layer definitions that specify the processing carried out in each layer and the interaction between the layers...in particular a stack definition is provided for each different type of communication link; column 10, lines 50 – 60), but does not specifically teach including a unique identifier in the notify message.

However, Aldred942 teaches establishing data communication links between applications (column 6, lines 15 – 32) and a notify message including a unique identifier

(channel characteristics) to identify the path (channels can be explicitly created by an API call...specifying the required channel characteristics, column 7, lines 23 – 67; channel creation may specify the data type, sub-type and throughput, column 17, line 63 – column 18, line 5), the unique identifier associated with a specific type of information to be transferred on the path (four types of channels are supported: standard, merged, synchronous, and serialized; column 6, lines 57 – 67).

It would have been obvious to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of a notify message including a unique identifier to identify a specific type of information to be transferred on the path as taught by Aldred942 to the invention of Pettus because separate logical data paths with their associated data types ease inter-application operation by presenting the data components individually with their nature and format independently available (column 28, line 63 – column 29, line 6).

As to claim 13, this is an apparatus claim that corresponds to method claim 1; note the rejection of claim 1 above, which also meets this claim.

As to claim 25, this is product claim that corresponds to method claim 1; note the rejection of claim 1 above, which also meets this claim.

As to claims 2, 3, 14, 15, 26, and 27, Pettus teaches (column 16, lines 1 – 46) forwarding a reply message (remote service exchange) to the first application (server interface 1120 exchanges the address of the session layer 1123 for the remote service exchange obtained from the service object reference and returns the remote service exchange to the application program 1100, Fig. 11) and the first application ascertains

the path data (it uses remote service address) after receipt of the reply message (when the application program communicates with the remote service, it uses the remote service address passed through the communications directory service to the networking service).

As to claims 5, 17, and 29, Pettus teaches (column 4, lines 18 – 47) the first application and the second application (client desiring to access a remote service) establish a path (uses the service object to set up the communications path) by ascertaining the path data (retrieves the appropriate service object) from a configuration file (from the communications directory service) that includes the path data (service object).

As to claims 6, 18, and 30, note the rejection to claim 1. As to configuration file, see the rejection to claim 5.

As to claims 7, 19, and 31 Pettus teaches (column 15, lines 40 – 50; column 16, lines 1 – 36) the path data (service object) is retrieved from the configuration file (communications directory) by a path function (service access routine, step 1200, Fig. 12; activation routine, step 1300, Fig. 13) that forwards a path message (remote service exchange) to the first application and the second application (returns the remote service exchange, step 1208, via configuration data stream 1116, client interface 1126 and data path 1102 to the application program 1100).

As to claims 10, 11, 22, 23, 34, and 35, Pettus teaches (column 12, lines 59 – 67) running the second application (server node is arranged with a system address space 800 which would include operating system programs and various shared libraries

that are used by the service applications running on the system, Fig. 8). Obviously, an application is considered to be executing after it is initialized and before it stops running.

3. Claims 8, 9, 20, 21, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pettus and Aldred942 in view of U.S. Patent No. 6,286,047 to Ramanathan.

As to claim 8, 20, and 32, Pettus as modified does not teach a monitoring function for detecting that an application has been added to the platform.

Ramanathan teaches (column 3, lines 45 – 67; column 4, lines 10 – 41) a monitoring function (discovery system) for detecting that an application has been added (in the first phase of discover, the services and service elements are detected). It would have been obvious to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of a monitoring function as taught by Ramanathan to the invention of Pettus as modified because this would detect the addition of new applications and allow other applications in the network to access the services provided by the new applications.

As to claim 9, 21, and 33, an application would obviously be loaded into volatile memory during execution.

4. Claims 4, 12, 16, 24, 28, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pettus and Aldred942 in view of U.S. Patent No. 5,539,886 to Aldred.

As to claims 4, 16, and 28, Pettus as modified does not teach forwarding ready messages.

Aldred teaches (column 31, lines 1 – 20) ready messages (SHARE_CONFIRMED). It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of ready messages as taught by Aldred to the invention of Pettus as modified because this would allow the connected applications to notify each other when they are ready to start communications.

As to claim 12, 24, and 36, Pettus as modified teaches (column 9, lines 30 – 39 of Pettus) communication channels but does not specify a channel handler.

However Aldred teaches (column 5, line 20 – column 6, line 13; column 18, lines 1 – 20) a handler (Port_event handler) to each channel (communications, channels and ports) and each handler processing messages in its assigned channel (more than one event handler may be present and each handles data communications related events).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of a channel handler as taught by Aldred to the invention of Pettus as modified because this would allow the data and events sent to the channel to be processed accordingly.

Conclusion

5. The applicant's amendment to independent claims 1, 13 and 25 included new limitation that necessitated the new grounds of rejection. In particular, the new limitation "the notify message including a unique identifier to identify the path, the unique identifier associated with a specific type of information to be transferred on the path" added to claims 1, 13 and 25 necessitated the new reference to Aldred942. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (703) 305-8498. The fax phone

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number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Li B. Zhen
Examiner
Art Unit 2126

lbz
August 26, 2003



JOHN FOLLANSBEE
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